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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/259,852

03/01/1999

MITCHELL A. MARKOW

P98-2401

5769

7590

12/31/2003

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EXAMINER

MEI, XU

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 12/31/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/259,852

**Applicant(s)**

MARKOW ET AL.

**Examiner**

Xu Mei

**Art Unit**

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 1999.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 .                      6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 6, 12, 19 and 44 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to disclose any means, method or functional steps to obtain a quality factor for the speaker as claimed.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-2, 4-5, 8-11, 13, 16-17 and 22-23 rejected under 35 U.S.C. 102(b) as being anticipated by Shin et al. (US-5,604,663, hereinafter, Shin).

Regarding claims 1-2, 4-5, 8-11 and 13, Shin discloses a portable computer expansion base system, comprising: a chassis that encloses at least one microprocessor connected to execute application software as selected by a user, the chassis having a rear wall which faces away from a user during normal use; and an elector-acoustic transducer (i.e., speaker) mounted in the chassis with front wall acoustic leaky; wherein the speaker is designed for free-space operation (Figs. 3-4 shows a portable computer chassis 72 which includes a plurality of computer speakers 110 mounted within; and at least one expansion base speaker 42 mounted in a expansion base chassis, and connected to be driven, together with the computer speakers of the portable computer docked in the expansion base). The computer chassis and expansion base chassis inherently having an acoustic impedance magnitude of less than half that of an acoustic suspension box of the same dimension. The portable computer inherently including a sound card and speaker 42 can be viewed as an external speaker. As for claim 10, the expansion base can be read as a main system module. The acoustic speaker output signals would inherently

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including wall-effect for providing acoustic spatial impression when the computer system is being used inside a room has walls.

5. Claims 16-17 and 22-23 are similar to claims 1-2 and 4-5 except for being couched in method terminology; such methods would be inherent when the structure is shown in the references.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 3, 14, 18, 24, 30-33, 35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shin in view of Sugimura (US-5,926,627).

Regarding claims 3, 14, 18, 24 and 37-38, what's not taught by Shin as discussed above in independent claims 1, 10 and 16 is the speaker is mounted to a rear wall of the computer chassis that faces away from a user during normal use. Sugimura in Fig. 22 discloses a computer chassis with speakers being mounted to a

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rear wall that faces away from a user during normal use. It would have been to one of ordinary skill in the art to combine the teaching of Shin and Sugimura by mounting speakers at the rear wall of the computer chassis that faces away from a user during normal use in order to create a better stereophonic or surround sound effect. And the output sound generation would have been inherently created in a range in front of the user's face when using the computer system.

Regarding claims 30-33 and 35, both computer systems of Shin and Sugimura would have including a sound source such as a CD player, a wave table, or a speaker phone. And a sound card are generally included in a computer system for audio signals processing.

8. Claims 20-21, 25-29, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shin in view of Sugimura as discussed in claim 24 above, and further in view of Koyama et al (US-5,581,621).

Regarding claims 20-21, 25-29, 34 and 36, the improved computer system by the combinations of Shin and Sugimura does not specifically including an equalizer and gain staging for the computer system. Koyama discloses a programmable equalizer for

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automatically adjusting the frequency response and amplifier gain (i.e., gain staging) of an audio system by divides an audio signal into number of frequency bands and selectively amplifies and attenuates each frequency band to achieve a desired sound quality (see Fig. 2, element 21 and col. 1, lines 31-44). It would have been obvious to one of ordinary skill in the art to further combines the teachings of Shin and Sugimura and Koyama to includes an programmable equalizer for automatically adjusting the frequency response and amplifier gain by divides an audio signal into number of frequency bands and selectively amplifies and attenuates each frequency band to achieve a desired sound quality for the computer system.

9. Claims 7, 15 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shin in view of Sugimura as discussed in claims 1-4 above, further in view of well known prior art.

Regarding claims 7, 15 and 39-43, the improved computer system by the combinations of Shin and Sugimura does not specifically including an long throw speaker or driver has a throw length greater than 10 percent of its minimum cone diameter. However, long throw speaker or driver is old and well known in the audio art for providing high output for high

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frequency audio signals with specific defined throw length of the speaker or driver. It would have been obvious to one of ordinary skill in the art to utilizes an old and well known long throw speaker or driver for the computer system of Shin or Sugimura in order to providing high output for high frequency audio output signals.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Park discloses a GAE for a personal computer system.

Burleson et al discloses an computer system with multiple speakers or drivers.

Johnson discloses a corner placement monitor stand with speakers mounted on the edges of the stand.

Markow discloses a portable PC with both dynamic and piezoelectric speakers.

Derocher et al discloses a portable PC having an enhanced speaker system.

11. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314 (for Technology Center 2600 only)



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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 703-308-6610. The examiner can normally be reached on Monday-Friday (9:30-6:00), alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.



**Xu Mei**  
**Primary Examiner**  
**Art Unit 2644**  
**12/10/2003**